

**REMARKS**Claim Changes

Claims 1 and 19 are amended to incorporate the subject matter of claim 3; claim 3 is canceled.

No amendment made is related to the statutory requirements of patentability unless expressly stated herein. No amendment is made for the purpose of narrowing the scope of any claim, unless Applicant had argued herein that such amendment is made to distinguish over a particular reference or combination of references. Any remarks made herein with respect to a given claim or amendment is intended only in the context of that specific claim or amendment, and should not be applied to other claims, amendments, or aspects of Applicant's invention.

Rejection of Claims 1-24 under 35 U.S.C. § 103(a) as being unpatentable over US 2006/0250960 (Ando) in view of US 5,436,899 (Fujino), and in view of US 6,154,499 (Bhaskar), and further in view of US 2003/0101408 (Martinian)

Applicant respectfully traverses in part and amends in part. Applicant has amended claims 1 and 19 to clarify the invention. Applicant therefore respectfully requests reconsideration of the rejection of claims 1-24 under 35 U.S.C. § 103(a) as being unpatentable over Ando in view of Fujino, and in view of Bhaskar, and further in view of Martinian.

Applicant respectfully disagrees with the statement on page 3 of the Office Action dated December 26, 2007 that Ando discloses “a transmitter, transmitting during a first portion of said first period of time.”

Ando is directed to a technology for data packet multi-access communication for reducing a collision packet in a CDMA cellular system. In this technology, a mobile station sends a voice data and a packeted data to a base station. The packeted data has control information having a request for a rate of transfer and a data size to the base station for transmission of continuous data. The mobile station has a voice/data packet switching device for switching either the voice data or the packeted data to the base station. The switching device operates based on a switch signal from a maximum rate controlling device in the mobile station. On receiving the packeted data, the base station

calculates a SIR (signal to interference power ratio) for the channel using the control information in the packeted data to decide a maximum rate of transfer. Upon receipt of the maximum rate of transfer from the base station, the mobile station varies its data transmission rate. The base station maintains a priority table for the mobile stations which have made a request to the base station. When a user is transferring data, the base station decreases the priority of other users based on the priority table. The priority of other users is decreased by decreasing their data transfer rate. When the user has completed the transfer, the base station releases the user's priority by decreasing the user's transfer rate and receives data from a user with next highest priority at an increased rate of transfer. See Ando, page 1, para. 0013, page 3, paras. 0055-0056, page 5, paras. 0106-0109.

Applicant's claim 1 recites "a transmitter, transmitting during a first portion of said first period of time." According to Applicant's specification, each of the communication devices will be transmitting a voice signal during an amount of time which is determined by a voice coding rate of each communication device. See Applicant's specification page 8, lines 5-9. In contrast, Ando merely discloses that the transmitting apparatus transmits an output from a modulation device connected to the transmitting apparatus. See Ando, page 3, para. 0059. Therefore, Ando nowhere discloses that transmitting apparatus transmits a signal during a first portion of a first period of time. Such a feature is missing in Ando.

Further, the Office Action appears to equate Applicant's "first control data" to Ando's switch signal. However, Applicant's claims 1, 17, 18, and 19 recite "a first voice signal... comprising... first control data." In contrast, Ando's switch signal is from a maximum rate controlling device as cited on page 3, para 55, lines 4-5. Ando's switch signal does not form a part of a voice signal. Thus, Applicant's feature of "a first control data" comprised in "a first voice signal" is missing in Ando. Further, Applicant's claims 1 and 19 as amended and claim 17 recites "first control data includes information indicating a first level of confidence in the presence of speech in said first voice signal." In contrast, Ando's switch signal from the maximum rate controlling device is used for switching a voice/data packet to a variable rate communication path coding device. See Ando, page 3, para. 0055. Therefore, Ando fails to disclose Applicant's first control data

comprised in a voice signal and that includes information indicating a first level of confidence in the presence of speech in said first voice signal.

Further, the Office Action appears to equate Applicant's "receiver" to Ando's receiving apparatus. However, Applicant's claims 1, 17, 18, and 19 further recite "receiver for receiving during a second portion of said first period of time." According to Applicant's specification, a first communication device receives a signal from a second communication device during a receive period which is a second portion of a transmit/receive cycle. See Applicant's specification, page 2, lines 3-5, and page 5, lines 14-17. In contrast, Ando merely discloses that the receiving apparatus demodulates a signal received through a receiving antenna. See Ando, page 3, para. 0061. Ando nowhere discloses that the receiving apparatus receives a signal during a second portion of said first period of time.

Further, the Office Action appears to equate Applicant's "second signal" to Ando's demodulated reception signal. However, Applicant's claims 1, 17, 18, and 19 further recite "a second signal having a first signal quality." According to Applicant's specification, two communication devices receive signals from each other in first mode when a signal quality is high or in second mode when a signal quality is low i.e., when both the devices have either a high signal quality or a low signal quality. See Applicant's specification, page 7, lines 5-8. Ando nowhere discloses a second demodulated reception signal having a first signal quality as a first demodulated reception signal. Thus, Applicant's feature of a second signal having a first signal quality is missing in Ando.

Further, the Office Action appears to equate Applicant's "second control data" to Ando's switch signal. Applicant's claims 1 and 19 as amended and claim 17 recite "second control data includes information indicating a second level of confidence in the presence of speech in said second signal." In contrast, Ando's switch signal from the maximum rate controlling device is used for switching a voice/data packet to a variable rate communication path coding device. See Ando, page 3, para. 0055. Therefore, Ando fails to disclose Applicant's second control data that includes information indicating a second level of confidence in the presence of speech in said second signal.

Applicant respectfully disagrees with the statement on page 4 of the Office Action dated December 26, 2007 that Fujino discloses “communication device to operate in a first mode... when said signal quality is above a threshold.”

Fujino is directed to a technology for providing a multiplexed transmission for efficient multiplexing and high quality communication. The technology is implemented using a sound coding unit which codes a voice data input by separating it into a core information part and a supplementary information part. The core information part ensures a minimum acceptable sound quality and the supplementary part is discardable based on transmission priorities. There is a silent section detecting unit which detects the silent sections of the voice data input. A band is flexibly allocated based on whether voice data comprises speech or silence. If there is more number of voice calls, more bands are allocated and sound quality is improved. No information is transmitted for silent sections which improves the transmission efficiency. See Fujino, Abstract, column 2, lines 1-5.

The Office Action appears to equate Applicant’s “first mode of operation when said signal quality estimation is above a threshold” to Fujino’s non-calling, silent or speech mode. However, according to Applicant’s claims 1, 17, 18, and 19, “in a first mode... said first voice coding rate is adjusted as a function of said first and second control data.” In contrast, Fujino merely discloses operating in a non-calling, silent, or speech mode based on whether data comprise speech or silence. See Fujino, column 1, lines 56-58. Fujino nowhere discloses a first mode where a voice coding rate is adjusted as a function of a first and second control data.

Similarly, the Office Action appears to equate Applicant’s “second mode of operation” to Fujino’s non-calling, silent or speech mode. However, According to Applicant’s claims 1, 17, 18, and 19, “in a second mode... said first error correction rate is adjusted as a function of said first and second control data.” In contrast, Fujino merely discloses operating in a non-calling, silent, or speech mode based on whether data comprise speech or silence. See Fujino, column 1, lines 56-58. Fujino nowhere discloses a second mode where a first error correction rate is adjusted as a function of a first and second control data.

Further, the Office Action appears to equate Applicant’s “first voice coding rate to be adjusted to a maximum voice coding rate,” and “first voice coding rate to be

adjusted to a first reduced voice coding rate” to Fujino’s dividing a transmission level to levels 1 through 7. However, Applicant’s claim 17 further recites “first voice coding rate to be adjusted to a maximum voice coding rate when said first level of confidence indicates a high confidence... and second level of confidence indicates a low confidence...,” and “first voice coding rate to be adjusted to a first reduced voice coding rate when said first level of confidence indicates a high confidence... and second level of confidence indicates a high confidence....” At most, Fujino discloses that transmission level is divided to levels 1 through 7 every 2 kbps. See Fujino, col. 18, line 57-58. Fujino nowhere discloses Applicant’s feature of adjusting the first voice coding rate to a maximum voice coding rate or to a first reduced voice coding rate based on a first and second level of confidence.

Further, the Office Action appears to equate Applicant’s “first error correction rate to be adjusted to a maximum error correction rate,” and “first error correction rate to be adjusted to a first reduced error correction rate” to Fujino’s dividing a transmission level to levels 1 through 7. However, Applicant’s claim 17 further recites “adjusted to a maximum error correction coding rate when said first level of confidence indicates a high confidence ... and second level of confidence indicates a low confidence...,” and “first error correction rate to be adjusted to a first reduced error correction coding rate when said first level of confidence indicates a high confidence... and second level of confidence indicates a high confidence....” At most, Fujino discloses that transmission level is divided to levels 1 through 7 every 2 kbps. See Fujino, col. 18, line 57-58. Therefore, Fujino nowhere discloses Applicant’s feature of first error correction coding rate to be adjusted to a maximum error correction rate or to a first reduced error correction rate based on a first and second level of confidence.

Applicant respectfully disagrees with the statement on page 5 of the Office Action dated December 26, 2007 that Bhaskar discloses “said first voice coding rate to be adjusted to a maximum voice coding rate.”

Bhaskar is directed to a technology for providing a communication network for carrying reliable voice communications. The communication network consists of a nested codec with a channel coder at a transmission end and a decoder at a reception end. The nested codec transmits a voice at a constant maximum bit rate but reconstructs the voice

at different bit rates according to channel conditions like attenuation due to obstacles such as buildings, trees, foliage, and environment terrain. At the receiver, when the channel conditions are good, the decoder uses the full bit rate resulting in high quality voice and if channel conditions degrade as detected by a channel estimator at the receiver, the decoder uses a more reliable subset of bits to reconstruct the voice signal at lower rates. See Bhaskar, Abstract, col. 1, lines 44-47, col. 5, lines 25-35.

The Office Action appears to equate Applicant's "said first voice coding rate to be adjusted to a maximum voice coding rate," and "said first voice coding rate to be adjusted to a first reduced voice coding rate" to Bhaskar's reconstructing a voice signal at different bit rates according to channel conditions. However, Applicant's claims 1, 17, and 19 further recite "adjusted to a maximum voice coding rate when said first level of confidence indicates a high confidence in the presence of speech in said first voice signal," and "adjusted to a first reduced voice coding rate when said first level of confidence indicates a high confidence in the presence of speech in said first voice signal." In contrast, Bhaskar's channel conditions refer to shadowing due to the transmission link obstacles such as buildings, trees, foliage, and environment terrain. See Bhaskar, column 1, lines 44-47. Therefore, Bhaskar nowhere discloses Applicant's feature of adjusting a first voice coding rate and adjusting a maximum voice coding rate to a first reduced voice coding rate based on a first and second level of confidence in presence of speech.

Applicant respectfully disagrees with the statement on page 5 of the Office Action dated December 26, 2007 that Martinian discloses "said first error correction rate to be adjusted to a maximum error correction rate,"

Martinian is directed to a technology for providing adaptive and multimode decoding in a data packet-based communication system to provide improved received signal quality in the presence of burst erasure or random bit errors. The technology is implemented by an apparatus consisting of a state detector, a burst error corrector, and an error corrector. A loss of a sequence of data packets during transmission results in a continuous string or a burst of erased symbols. The state detector detects a burst erasure level based on the loss of data packets. If the level is above a first selected threshold, the burst erasure corrector decodes the received data packets at a first burst erasure correcting

code. When the detected burst erasure level is above a second threshold, the data packets are decoded at a second burst erasure correcting code. When a burst erasure is not detected, the error corrector decodes the data packets at a first random bit error correction code. When the burst erasure level lies in between the first and the second threshold, combined erasure and error detector are used to decode the data packets utilizing multidescriptive burst erasure and bit error correction code. See Martinian, col. 2, para. 0013, para. 0016, and para. 0081.

Applicant's claim 17 recites "first error correction rate to be adjusted to a maximum error correction rate when said first level of confidence indicates a high confidence in the presence of speech in said first voice signal" and "first error correction rate to be adjusted to a first reduced error correction rate when said first level of confidence indicates a high confidence a high confidence in the presence of speech in said first voice signal." In contrast, Martinian shifts from random bit error correction decoding to burst erasure correction decoding as the packet loss rate increases and it shifts from burst erasure correction decoding to error correction decoding when the packet loss rate decreases. See Martinian, page 8, para 0081, lines 1-2, 9-12, 14-17. Therefore, Martinian nowhere discloses Applicant's feature of first error correction rate to be adjusted to a maximum error correction rate or to a first reduced error correction rate based on a confidence in presence of speech in a voice signal.

Therefore, Applicant respectfully submits that the combination of Ando, Fujino, Bhaskar, and Martinian does not teach or suggest all the claim limitations as set forth in independent claims 1, 17, and 19 as amended.

For the above reasons, Applicant submits that independent claims 1, 17, 18 and 19 are not obvious in view of the combination of Ando, Fujino, Bhaskar, and Martinian and therefore that the rejection of independent claims 1, 17, and 19 under 35 USC 103(a) should be withdrawn. Applicant requests that independent claims 1, 17, and 19 now be passed to allowance.

Dependent claims 2, 4-16, and 20-22 depend from, and include all the limitations of independent claims 1 and 19. Therefore, Applicant respectfully requests the reconsideration of dependent claims 2, 4-16, and 20-22 and requests withdrawal of the rejection.

Conclusion

Applicant has reviewed the other references of record and believes that Applicant's claimed invention is patentably distinct and nonobvious over each reference taken alone or in combination. Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Such action is earnestly solicited by the Applicant. Should the Examiner have any questions, comments, or suggestions, the Examiner is invited to contact the Applicant's attorney or agent at the telephone number indicated below.

Please charge any fees that may be due to Deposit Account 502117, Motorola, Inc.

Respectfully submitted,

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